User Manual

IP CAMERA



WARINGS

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS PRODUCT TO RAIN OR MISTURE.
DO NOT INSERT ANY METALLIC OBJECT THROUGH VENTILATION GRILLS.

CAUTION

	CAUTION	
	RISK OF ELECTRIC SHOCK DO NOT OPEN	

CAUTION：TO REDUCE THE RISK OF ELECTRIC SHOCK.
DO NOT REMOVE COVER (OR BACK).
NO USER-SERVICEABLE PARTS INSIDE.
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

COPYRIGHT

Content

V1.1_120515

I. Preface

This is a 1/2.7’’ 2M CMOS IP camera with the web server built in. User can view real-time video via IE browser. It supports H.264, JPEG and MPEG4 video compression which provides smooth and high video quality. The video can be stored in the Micro SD card and playback remotely.
With user friendly interface, it is an easy-to-use IP camera which is designed for security application.

II. Product Specifications

- 1/2.7” 2M CMOS Sensor
- Digital Noise Reduction
- Digital Wide Dynamic Range
- Shutter Speed adjustion
- Sense Up adjustion
- Power over Ethernet available (Option)
- H.264/ JPEG / MPEG4 compression
- Micro SD card backup
- DI/DO
- Support iPhone/ Android/ Symbian /Blackberry/Mac
- Triple Streaming
- SDK for Software Integration
- Free Bundle 36 Channel Recording Software

Specifications

Hardware	
CPU	ARM 9 ,32 bit RISC
RAM	256MB
Flash	16MB
Image sensor	1/2.7” 2M CMOS sensor
Lens Type	4.2mm @ F1.6
Sensitivity	1.0 Lux @ 25fps

Shutter Time	1 / 5 ~ 1 / 10,000 sec
Audio	G.711(64K) and G.726(32K,24K) audio compression Input : Mic built-in Output : 3.5mm phone jack, Support 2-way audio
IO	DI / DO
Power over Ethernet	Optional
Operating Temperature	0℃~40℃
Dimensions	59mm x 93.7(mm)x 45.5(mm)
Weight	240g
Network	
Ethernet	10/ 100 Base-T
Network Protocol	HTTP, HTTPS, SNMP, QoS/DSCP, Access list, IEEE 802.1X, RTSP, TCP/IP, UDP, SMTP, FTP, PPPoE, DHCP, DDNS, NTP, UPnP, 3GPP, SAMBA
Wireless (Optional)	
Wireless	802.11 n/b/g
Security	WEP,WPA-PSK,WPA2-PSK
System	
Video Resolution	1920x1080@25fps, 1280x720@25fps, ,640x480@30fps, 320x240@30fps, 176x144@30fps
Triple Streaming	Yes
CMOS setting	Brightness, Contrast, Hue, Saturation, Sharpness, AGC, Shutter Speed adjustment, Sense-Up, D-WDR, Flip, Mirror, Noise reduction
Image snapshot	Yes
Full screen monitoring	Yes
Zoom	Yes
Privacy Mask	Yes, 3 different areas
Compression format	H.264/ M-JPEG/ MPEG4
Video bitrates adjust	CBR, VBR
Motion Detection	Yes, 3 different areas
Triggered action	Mail, FTP, Save to SD card, DO, SAMBA

Pre/ Post alarm		Yes, configurable
Security		Password protection, IP address filtering, HTTPS encrypted data transmission, 802.1X port-based authentication for network protection, QoS/DSCP
Firmware upgrade		HTTP mode, can be upgraded remotely
Simultaneous connection		Up to 10
Micro SD card management		
Recording trigger		Motion Detection, IP check, Network break down (wire only),schedule, DI
Video format		AVI, JPEG
Video playback		Yes
Delete files		Yes
Web browsing requirement		
OS		Windows 7, 2000, XP, 2003, Microsoft IE 6.0 or above
Hardware	Suggested	Intel Dual Core 2.53G,RAM: 1024MB, Graphic card: 128MB
	Minimum	Intel-C 2.8G, RAM: 512MB, Graphic card: 64MB

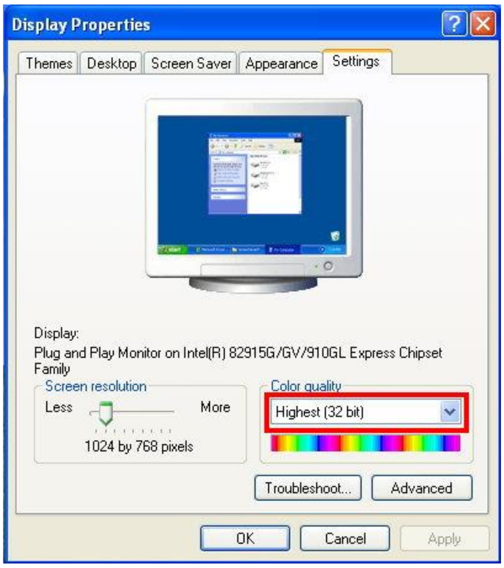
III. Product Installation

A. Monitor Setting

i. Right-Click on the desktop. Select “ Properties”



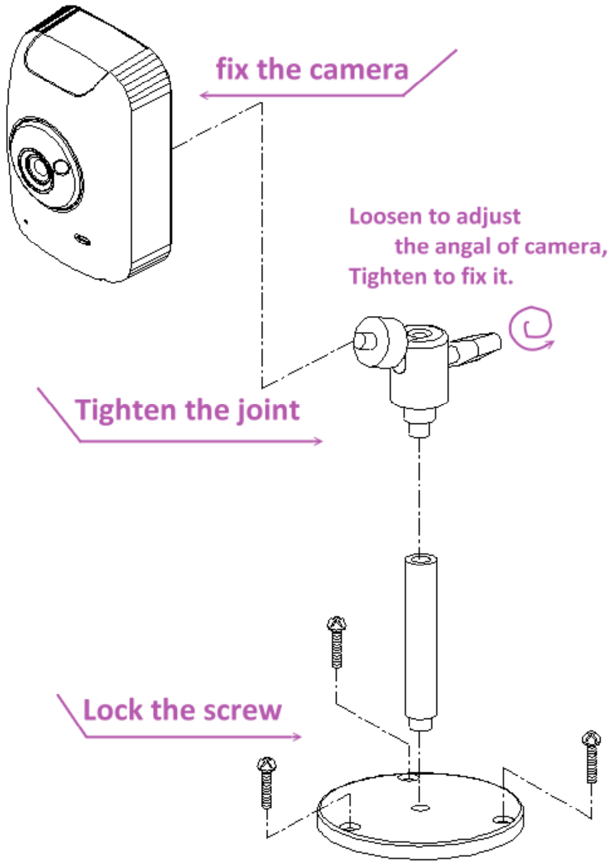
ii. Change color quality to highest (32bit).



B. Hardware Installation Assignment

i. Camera Construction

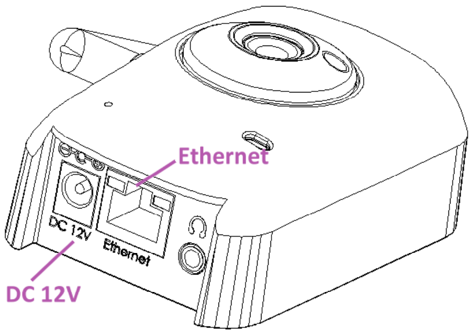
Please refer to the picture for camera installation. Use the screws to lock the bracket to the wall or ceiling, and then connect the camera to the bracket. There's a knob on the back of the bracket. Loosen the knob and you can adjust the angle of camera. Tighten it to fix the angle.



ii. Connect power adaptor.

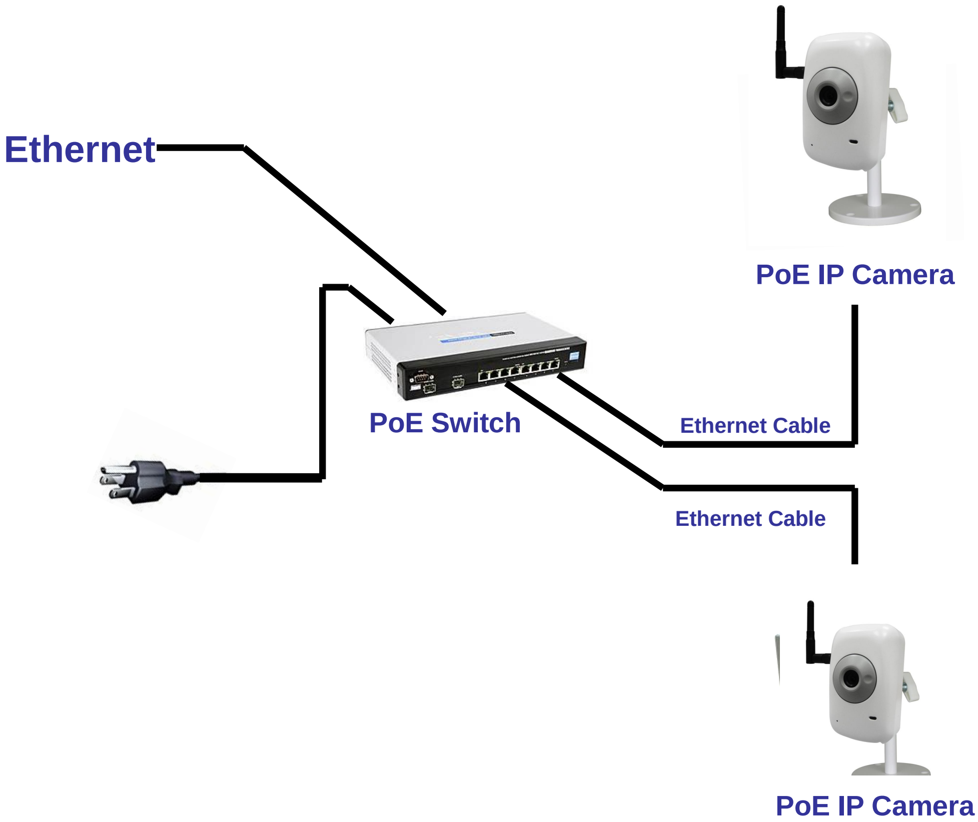
Connect IP Cam to PC or network with Ethernet cable.

Set up the network configurations according to the network environment. For further explanation, please refer to chapter VI, "Network Configuration for IP CAMERA".



iii. PoE (Power Over Ethernet)(Optional) **802.3af, 15.4W PoE Switch is recommended**

Power over Ethernet (PoE) is a technology that integrates power into a standard LAN infrastructure. It enables power to be provided to the network device, such as an IP phone or a network camera, using the same cable as that used for network connection. It eliminates the need for power outlets at the camera locations and enables easier application of uninterruptible power supplies (UPS) to ensure 24 hours a day, 7 days a week operation.



C. IP Assignment

i. Use the software, "IP Installer" to assign the IP address of IP CAMERA. The software is in the attached software CD.

ii. IP installer supports two languages

a. IPInstallerCht.exe：Chinese version

b. IPInstallerEng.exe：English version

iii. There are 3 kinds of IP configuration.

a. Fixed IP (Public IP or Virtual IP)

b. DHCP (Dynamic IP)

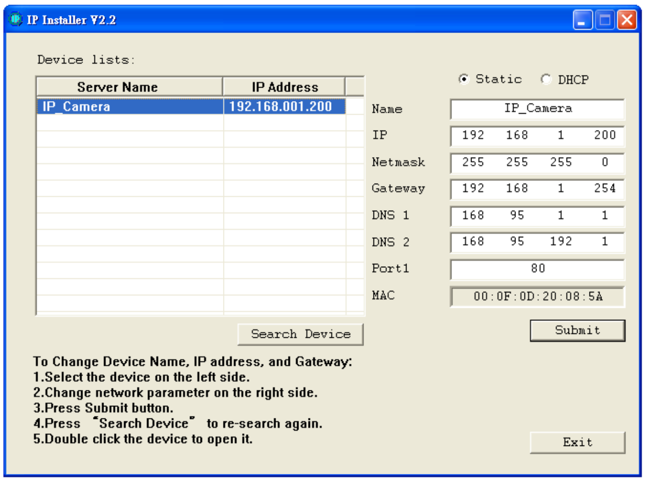
c. Dial-up (PPPoE)

iv. Execute IP Installer

v. For Windows XP SP2 user, it may popup the following message box. Please click "Unblock".



vi. IP Installer configuration:



vii. IP Installer will search all IP Cameras connected on Lan. The user can

click “Search Device” to search again.

viii. Click one of the IP Camera listed on the left side. The network configuration of this IP camera will show on the right side. You may change the “name” of the IP Camera to your preference (eg: Office, warehouse). Change the parameter and click “Submit” then click “OK”. It will apply the change and reboot the Device.



ix. Please make sure the subnet of PC IP address and IP CAM IP address are the same.

The same Subnet:

IP CAM IP address: 192.168.1.200

PC IP address: 192.168.1.100

Different Subnets:

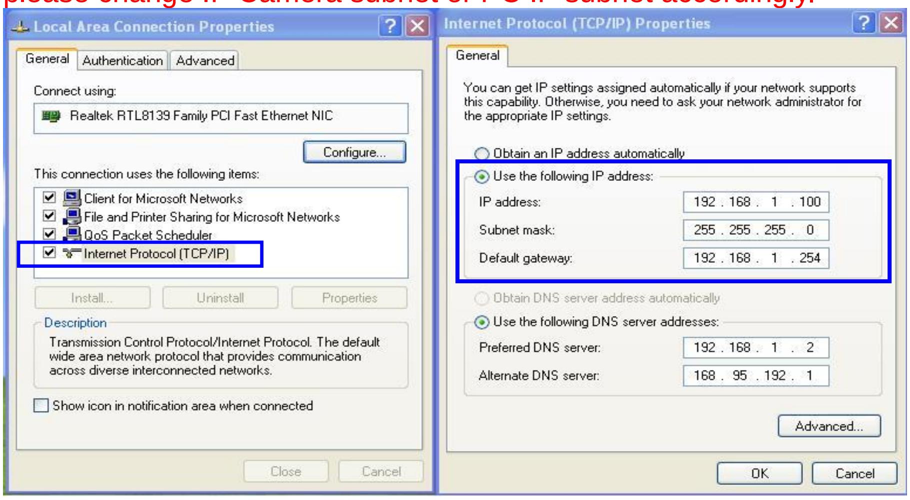
IP CAM IP address: 192.168.2.200

PC IP address: 192.168.1.100

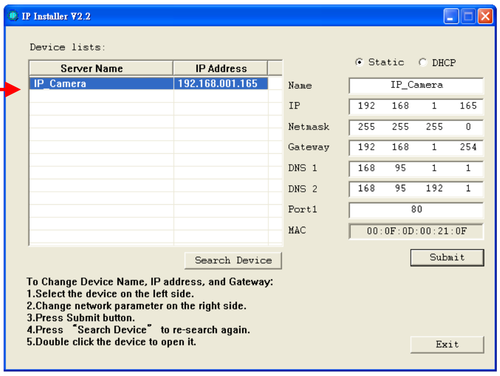
To Change PC IP address:

Control Panel→Network Connections→Local Area Connection Properties→Internet Protocol (TCP/IP) →Properties

Please make sure your IP Camera and PC have the same Subnet. If not, please change IP Camera subnet or PC IP subnet accordingly.



x. A quick way to access remote monitoring is to left-click the mouse twice on a selected IP Camera listed on “Device list” of IP Installer. An IE browser will be opened.

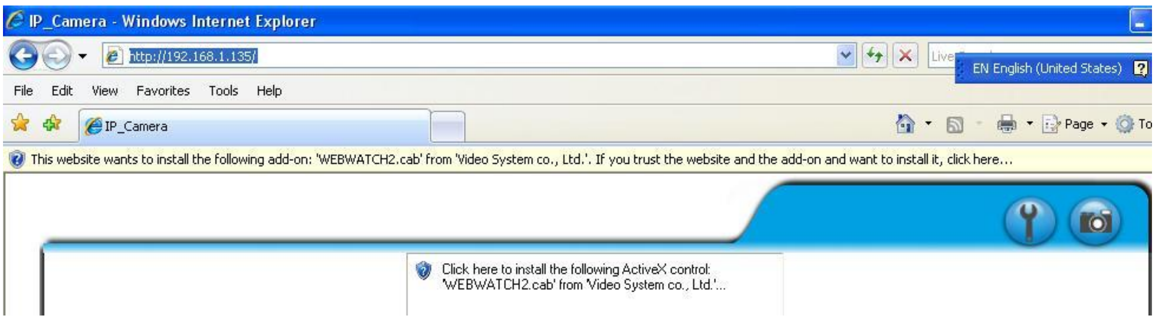


xi. Then, please key in the default "user name: admin" and "password: admin".



D. Install ActiveX control:

For the first time to view the camera video via IE, it will ask you to install the ActiveX component.



If the installation failed, please check the security setting for the IE browser.

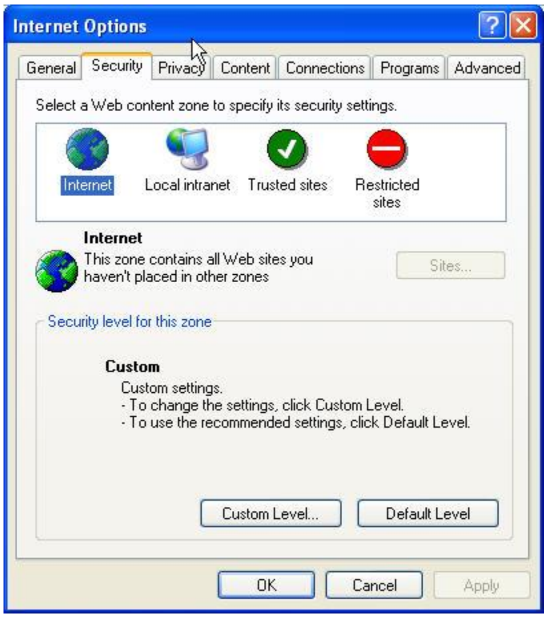
i. IE → Tools → Internet Options… → Security Tab → Custom Level… → Security Settings → Download unsigned ActiveX controls→ Select "Enable" or Prompt.

ii. IE → Tools → Internet Options… → Security Tab → Custom Level… →Initialize and script ActiveX controls not marked as safe → Select "Enable" or Prompt.

1



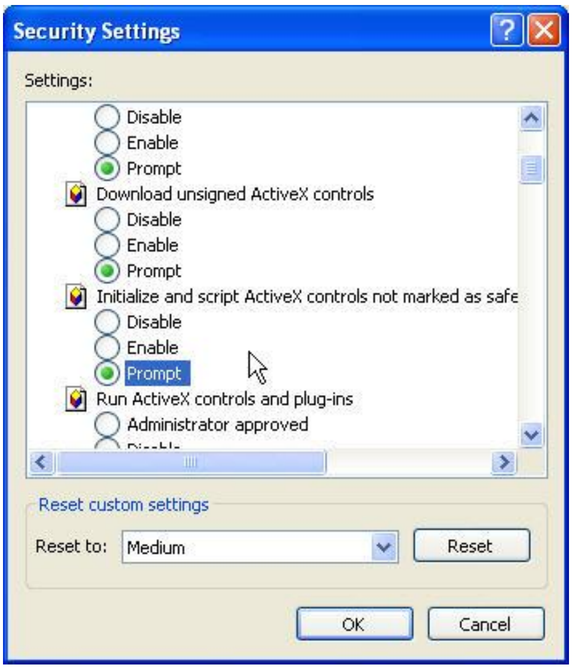
2



3



4



5

When popup the following dialogue box, click "Yes".

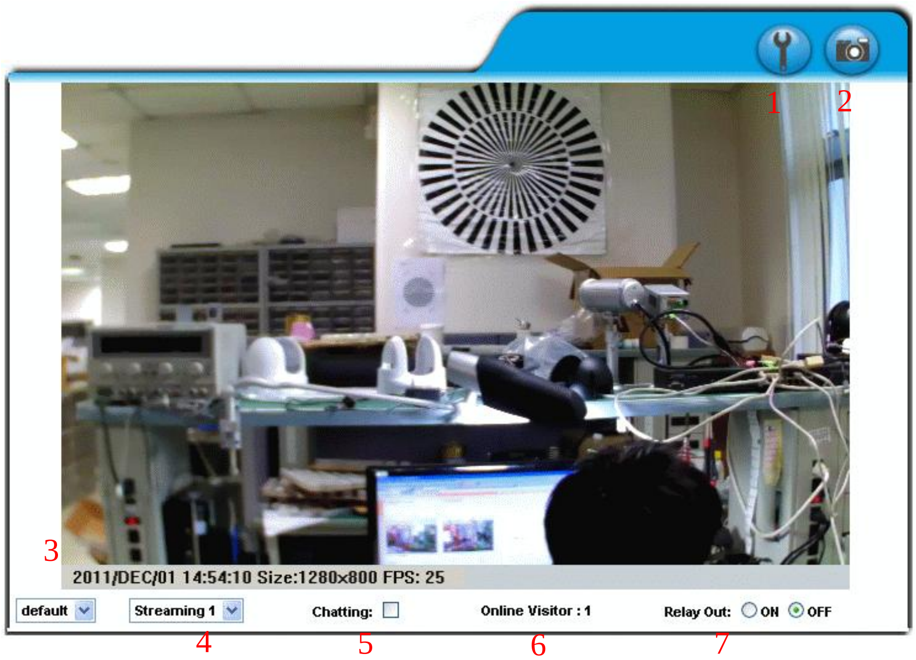


IV. Live Video

Start a IE browser, type the IP address of the IP camera in the address field. It will show the following dialogue box. Key-in the user name and password. The default user name and password are “**admin**” and “**admin**”.



When connect to the IP CAMERA。The following program interface shows.



1. ：Get into the administration page

2. ：Video Snapshot

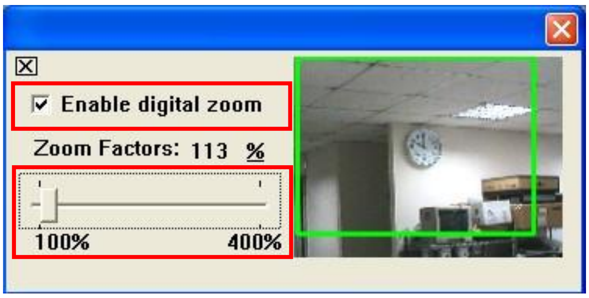
3. Show system time, video resolution, and video refreshing rate
4. Select video streaming source **(When streaming 2 setting in『Video Setting』 is closed, this function will not display)**
5. IP Camera supports 2-way audio. Click the "Chatting" check box. Then you can use microphone which connects to the PC to talk to server side, which is IP Camera side
6. Shows how many people connect to this IP camera
7. Select to enable or disable the relay.

Double-click the video, it will change to full screen mode. Press "Esc" or double-click the video again, it will change back to normal mode.

Right-Click the mouse on the video, it will show a pop-up menu.

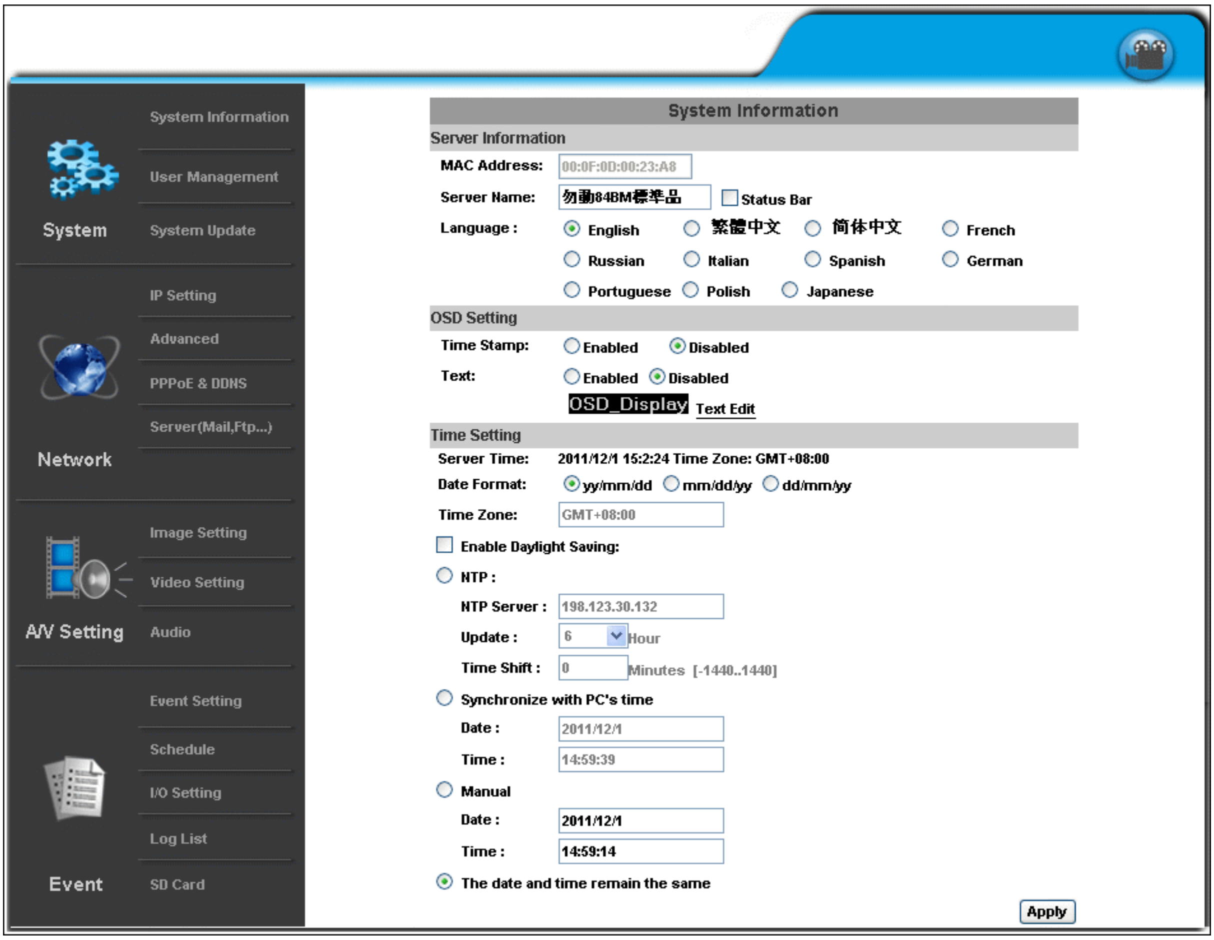


1. Snapshot：Save a JPEG picture
2. Record Start：Record the video in the local PC. It will ask you where to save the video. To stop recording, right-click the mouse again. Select "Record Stop". The video format is AVI. Use Microsoft Media Player to play the recorded file.
3. Mute：Turn of the audio. Click again to turn on it.
4. Full Screen：Full-screen mode.
5. ZOOM: Enable zoom-in and zoom-out functions. Select "Enable digital zoom" option first within the pop-up dialogue box and then drag and drop the bar to adjust the zoom factors.



V. Configuration

Click  to get into the administration page. Click  to go back to the live video page.



A.System

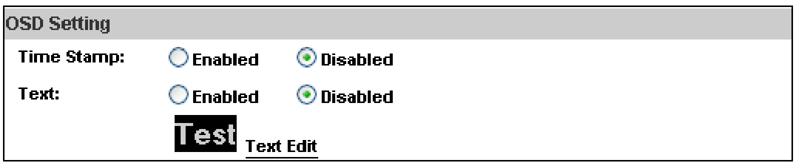
i、 System Information

a. Server Information: Set up the camera name, select language, and set up the camera time.

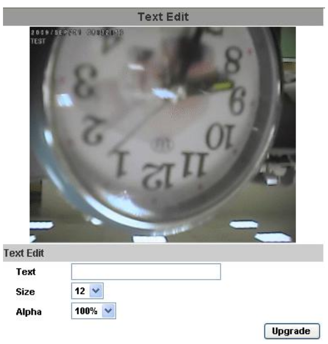
1. Server Name：This is the Camera name. This name will show on the IP Installer.
2. Select language：There are English, Traditional Chinese, and Simplified Chinese to select. When change, it will show the following dialogue box for the confirmation of changing language.



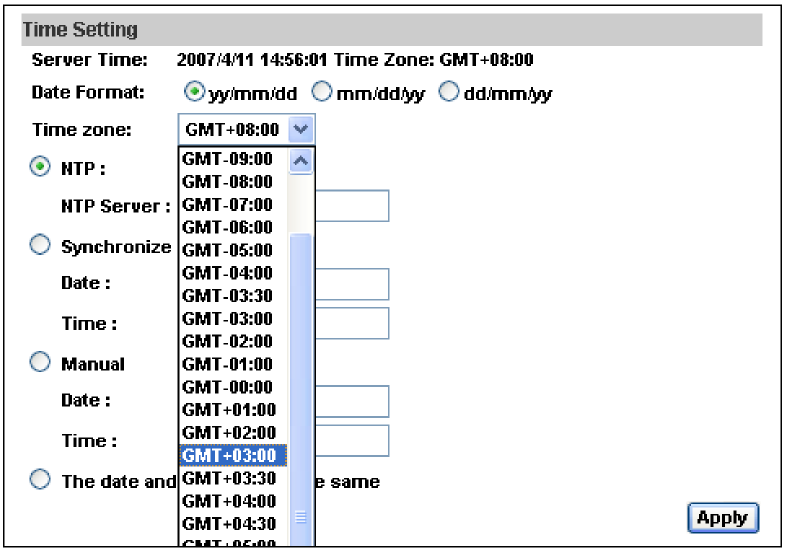
b. OSD Setting: Select a position where date & time stamp / text showing on screen.



Moreover, click Text Edit can entry to adjust the OSD contents which is including Size and Alpha of text. Finally, click Upgrade button to reserve the setting.

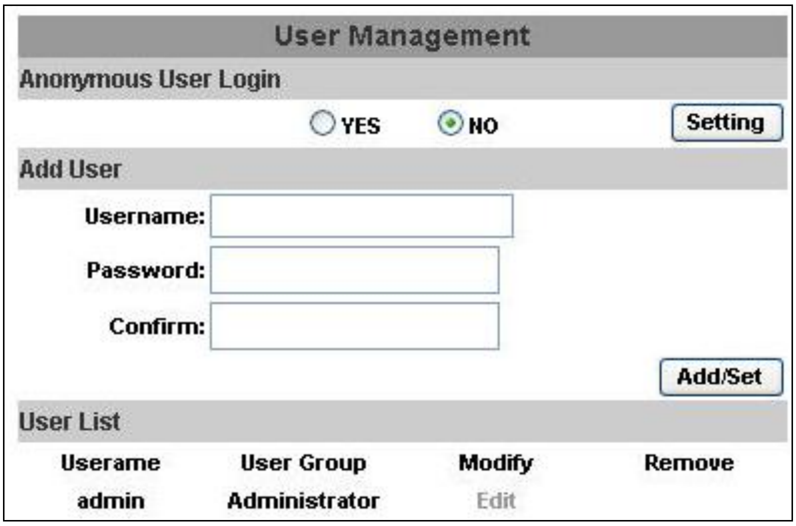


c. Server time setting：Select options to set up time - “NTP”, “Synchronize with PC’s time”, “Manual”, “The date and time remain the same”.



ii、 User Management

IP CAMERA supports three different users, administrator, general user, and anonymous user.



a. Anonymous User Login：

Yes：Allow anonymous login

No：Need user name & password to access this IP camera

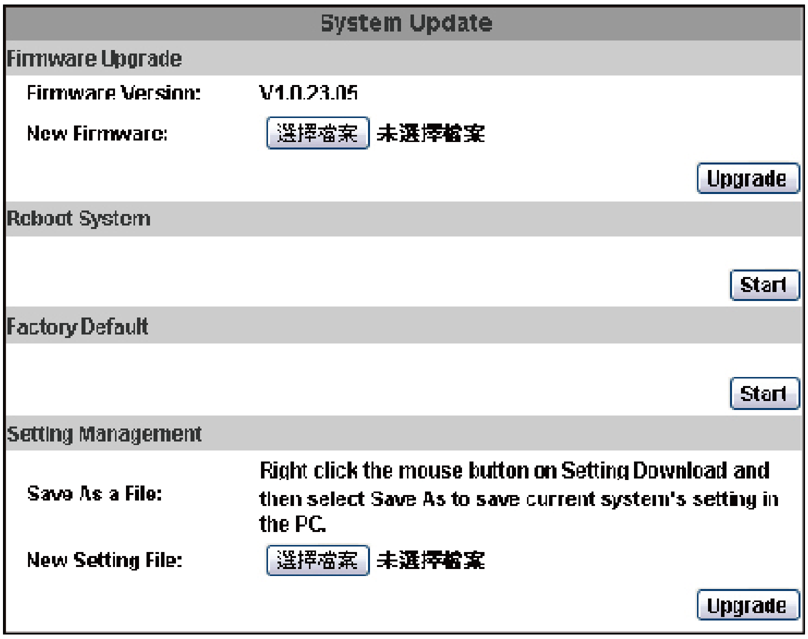
b. Add user：

Type the user name and password, then click “Add/Set”.

c. Click “edit” or “delete” to modify the user.



iii、 System update：



a. To update the firmware online, click “Browse…” to select the firmware. Then click “Upgrade” to proceed.

b. Reboot system：re-start the IP camera

c. Factory default：delete all the settings in this IP camera.

d. Setting Management：User may download the current setting to PC, or upgrade from previous saved setting.

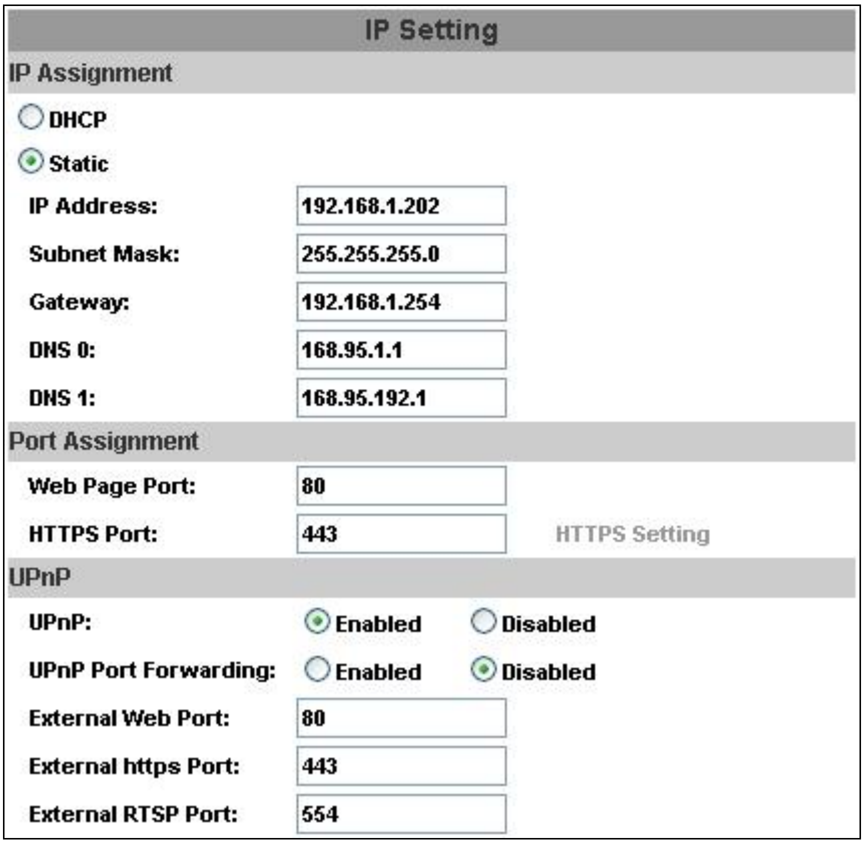
   1. Setting download:
      Right-click the mouse button on Setting Download → Select “Save AS…” to save current IP CAM setting in PC → Select saving directory → Save

   2. Upgrade from previous setting
      Browse → search previous setting → open → upgrade → Setting update confirm → click **index.html**. to return to main page

B.Network

i、 IP Setting

IP Camera supports DHCP and static IP.



a. DHCP：Using DHCP, IP Camera will get all the network parameters automatically.

b. Static IP：Please type in IP address, subnet mask, gateway, and DNS manually.

c. Port Assignment: user may need to assign different port to avoid conflict when setting up IP assignment.

   1. Web Page Port: setup web page connecting port and video transmitting port (Default: 80)
   2. HTTPS Port: setup port for HTTPS transmitting (Default: 443)

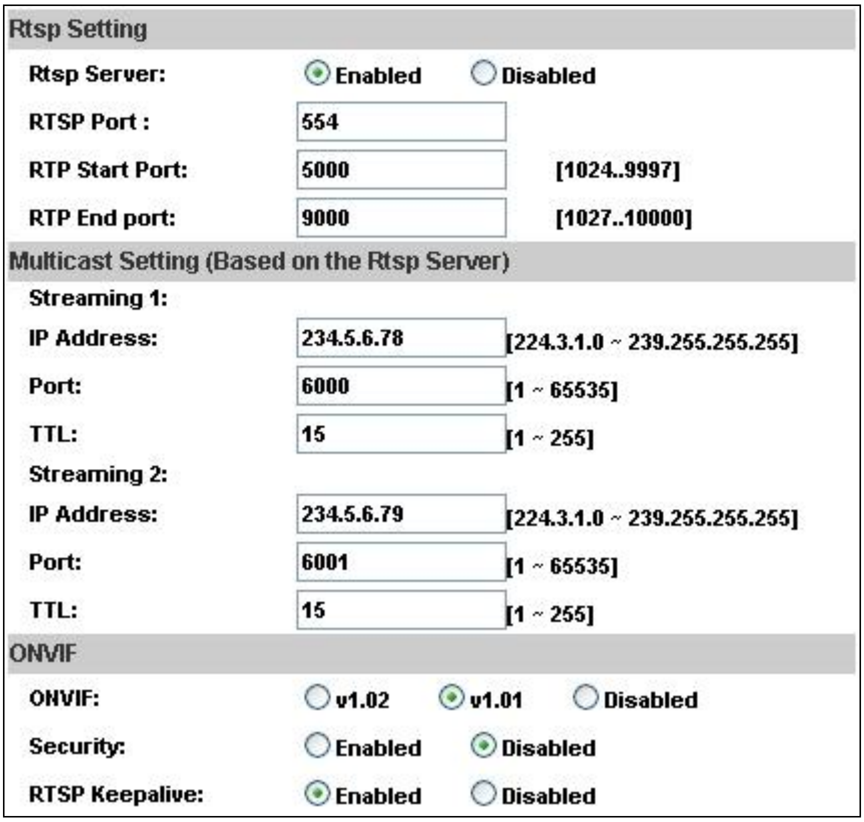
d. UPnP

This IP camera supports UPnP, If this service is enabled on your computer, the camera will automatically be detected and a new icon will be added to "My Network Places."

Note: UPnP must be enabled on your computer.

Please follow the procedure to activate UPnP

1. open the Control Panel from the Start Menu
2. select Add/Remove Programs
3. Select Add/Remove Windows Components and open Networking Services section
4. Click Details and select UPnP to setup the service
5. The IP device icon will be added to "MY Network Places"
6. User may double click the IP device icon to access IE browser



e. RTSP setting

1. RTSP Server: enable or disable
2. RTSP Port: setup port for RTSP transmitting (Default: 554)
3. RTSP Start and End Port: in RTSP mode, you may use TCP and UDP for connecting. TCP connection uses RTSP Port (554). UDP connection uses RTSP Start and End Port.

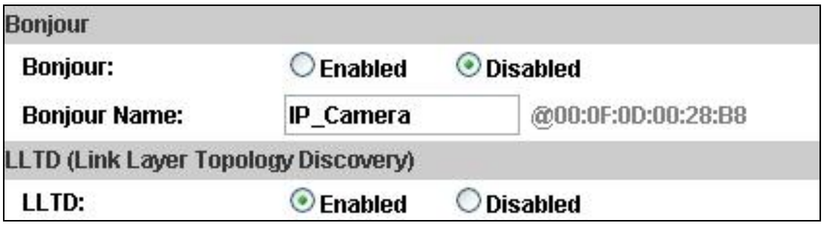
f. Multicast Setting (Based on the RTSP Server)

Multicast is a bandwidth conservation technology. This function allow several user to share the same packet sent from IP camera. To use Multicast, appoint IP Address and port here. TTL means the life time of packet, The larger the value is, the more user can receive the packet.

To use Multicast, be sure to enable the function "Receive Multicast" in your media player.

g. ONVIF

Choose your ONVIF version and settings.



h. Bonjour

This function enable MAC systems to link to this IP camera. Key in the name here.

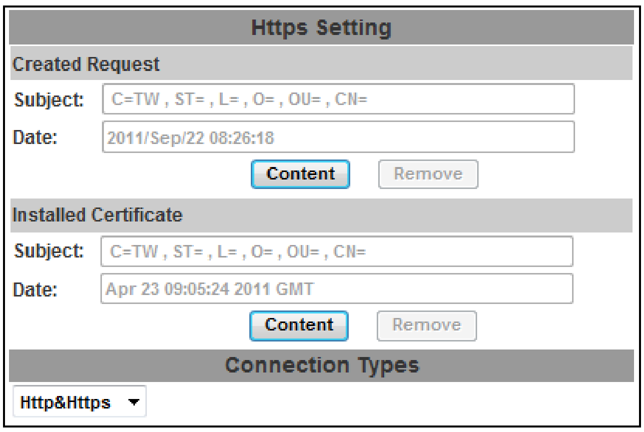
i. LLTD

If your PC supports LLTD, enable this function then you can check the connection status, properties, and device position(like IP address) of this IP Camera in the network map.

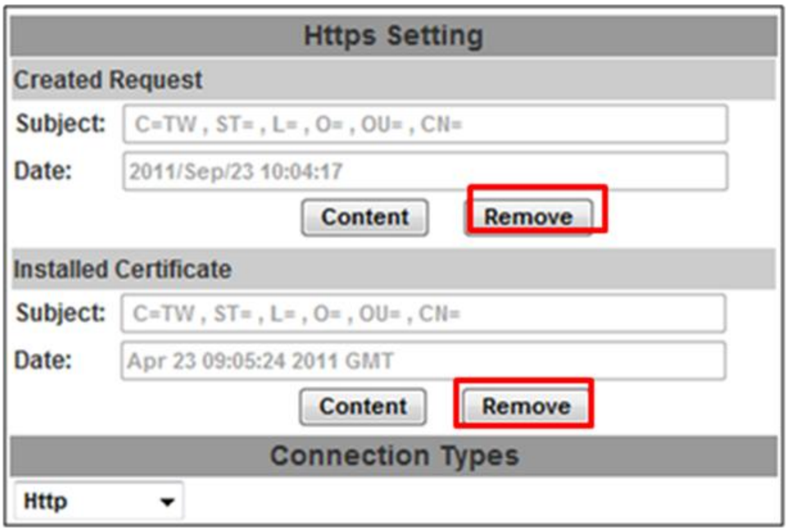
Enable or disable RTSP server first and can setup RTSP port and the start and end port of RTP

ii、 Advanced：

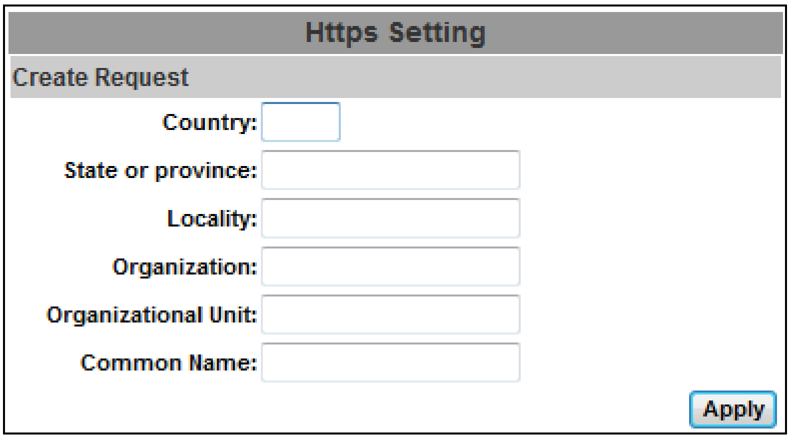
a. Https (Hypertext Transfer Protocol Secure)：Https can help protect streaming data transmission over the internal on the higher security level.



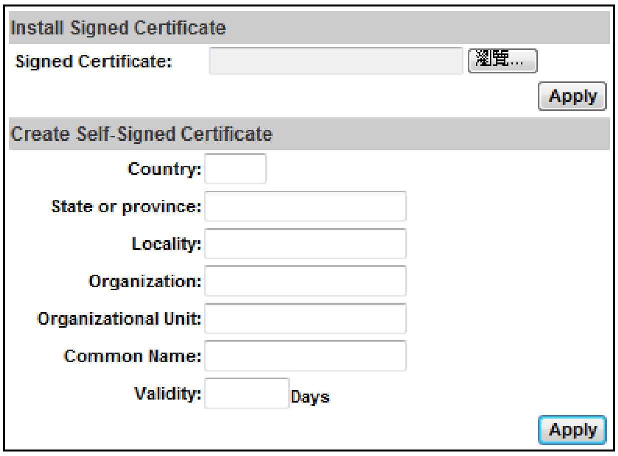
Https setting：Before setting new request, please remove old secure identification identification at Http connection type.



1. Created Request: remove secure identification in Created request mode. There is a warning message showing. Please set "Yes" to remove secure identification.
2. Setting the secure identification and apply it.



3. Installed Certificate: remove Certificate in .Installed Certificate mode. There will be a warning message to check again.
4. There are two ways to set Certificate- Install Signed Certificate and Create Self-Signed Certificate.

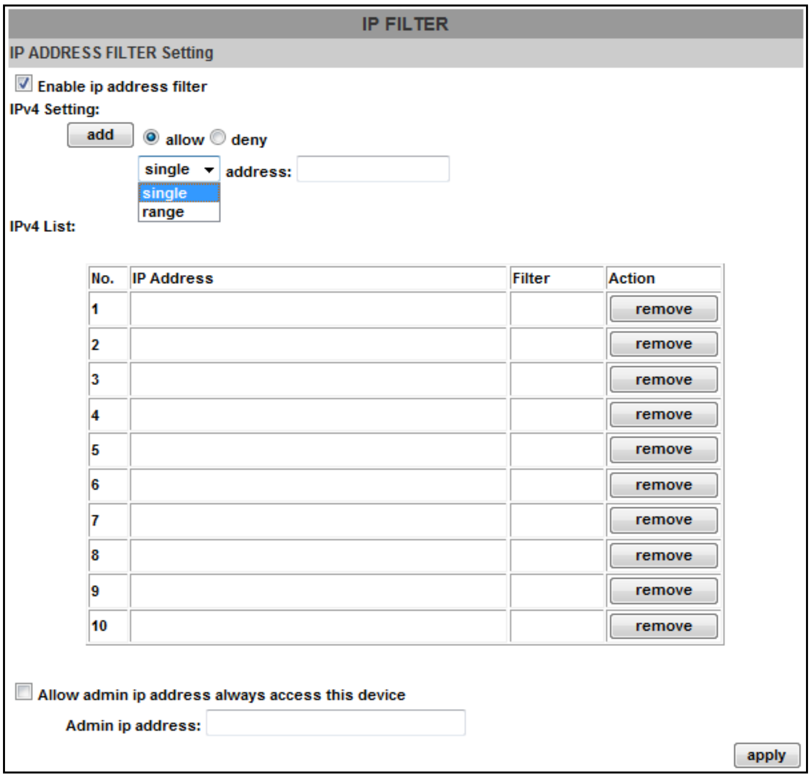


b. SNMP(Simple Network Management Protocol)：

1. Enable SNMPv1 or SNMPv2 and write the name of Write Community and Read Community.
2. Enable SNMPv3, please set Security Name, Authentication Type, Authentication Password, Encryption Type, Encryption Password of Write mode and Read mode.
3. Enable SNMPv1/SNMPv2 Trap can detect the Trap server. Please set what event need to detect.

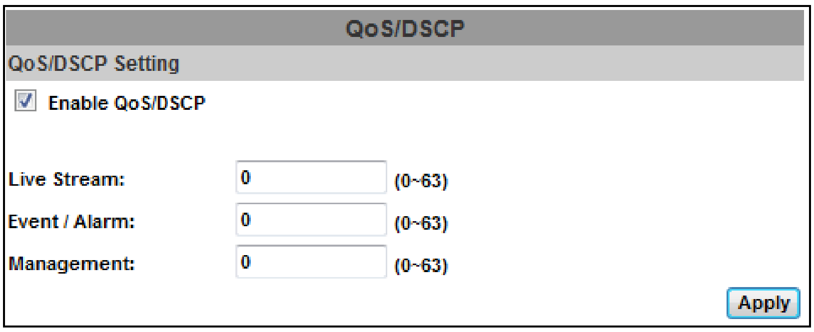


c. Access list：”Enable IP address filter” can set IP address which can allow or deny to this camera. There are two options, single and range, for user to set the IP address.



d. QoS/DSCP(Quality of Server/Differentiated Services Code-point)：

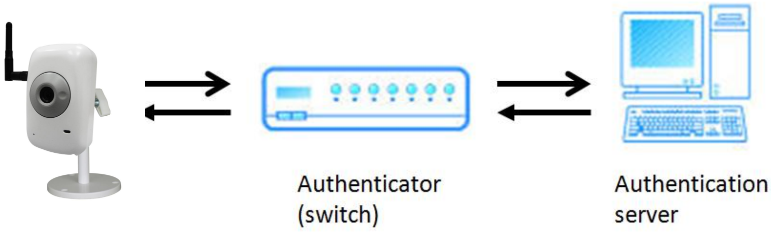
DSCP specifies a simple mechanism for classifying and managing network traffic and provide QoS on IP networks. DSCP is a 6-bit in the IP header for packet classification purpose. Please define the reserve for Live Stream, Event / Alarm and Management.



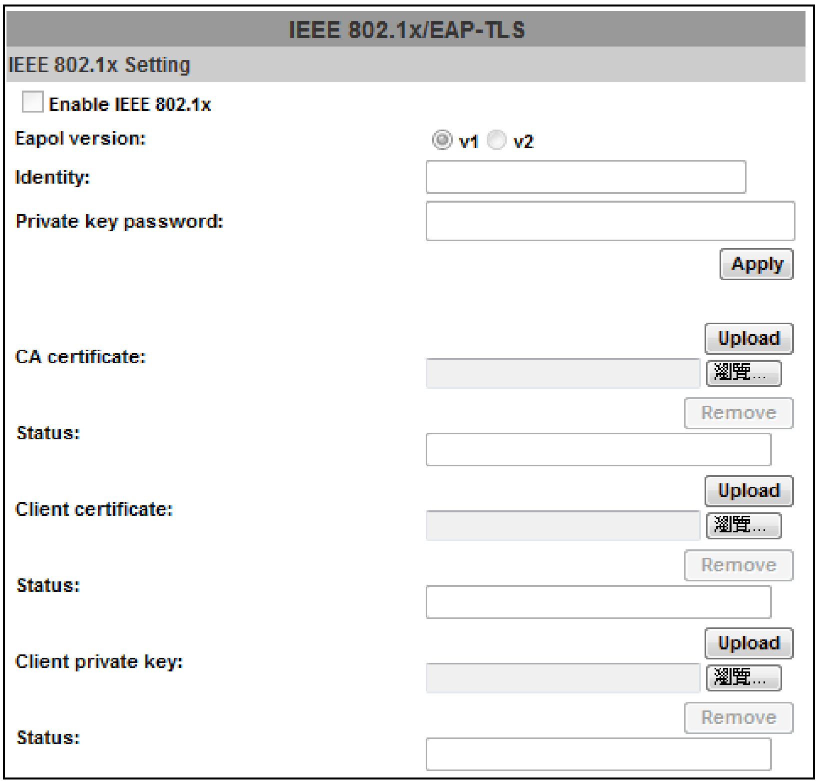
e. IEEE 802.1x：

IEEE 802.1x is an IEEE standard for port-based Network Access Control. It provides an authentication mechanism to device wishing to attach to a LAN or WLAN.

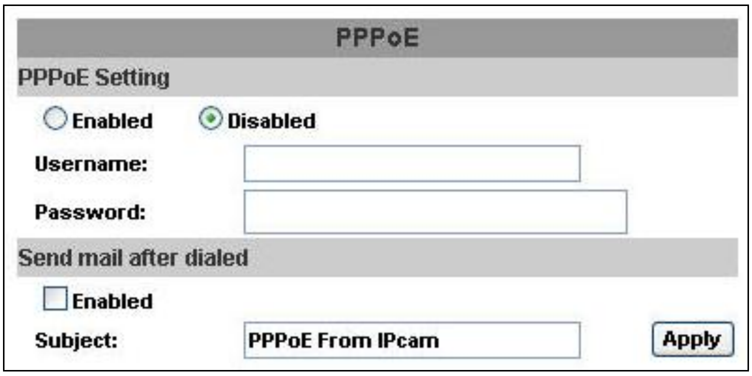
The EAPOL protocol support service identification and optional point to point encryption over the local LAN segment.



Please check what version of the authenticator and authentication server support. This camera supports EAP-TLS method. Please enter ID, password issued by the CA, then upload related certificates.



iii、 PPPoE：



Select “Enabled” to use PPPoE.

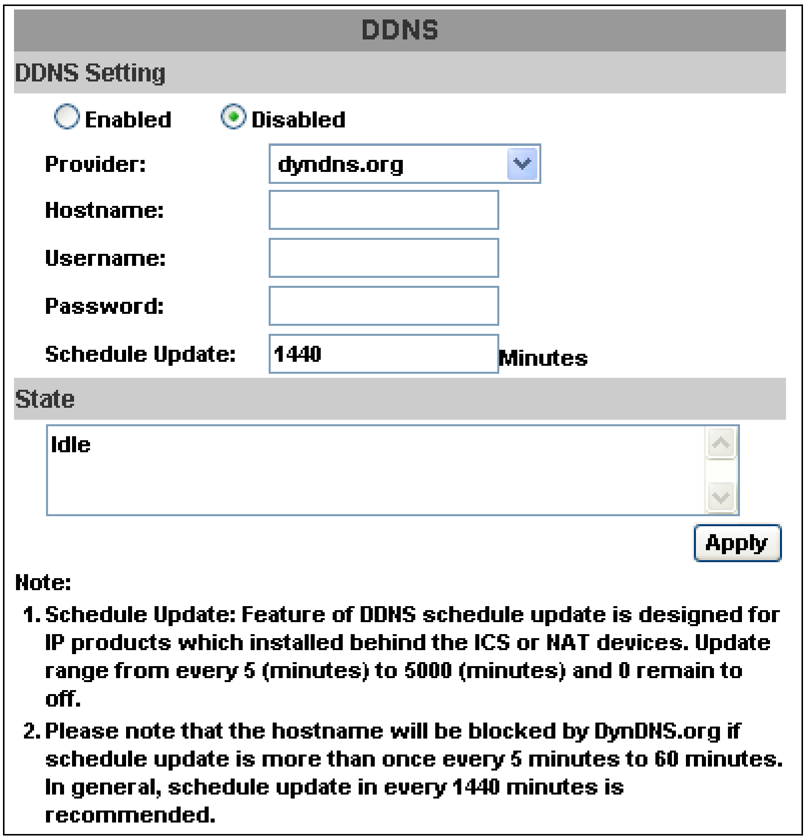
Key-in Username and password for the ADSL connection.

Send mail after dialed：When connect to the internet, it will send a mail to a specific mail account. For the mail setting, please refer to “Mail and FTP” settings.

iv、 DDNS：

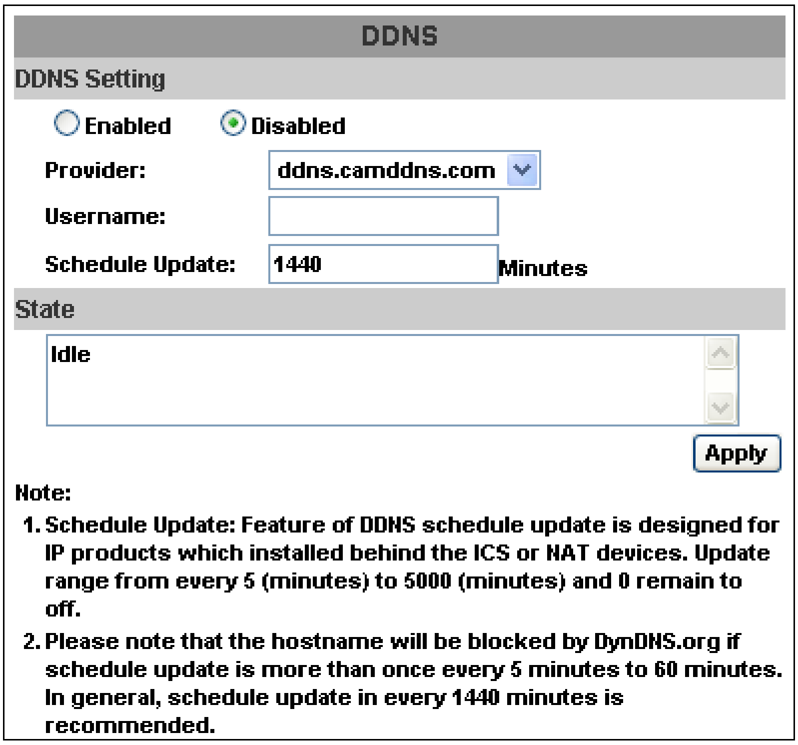
It supports DDNS (Dynamic DNS) service.

a. DynDNS：



1. Enable this service
2. Key-in the DynDNS server name, user name, and password.
3. Set up the IP Schedule update refreshing rate.
4. Click “Apply”
5. If setting up IP schedule update too frequently, the IP may be blocked. In general, schedule update every day (1440 minutes) is recommended.

b. Camddns service：



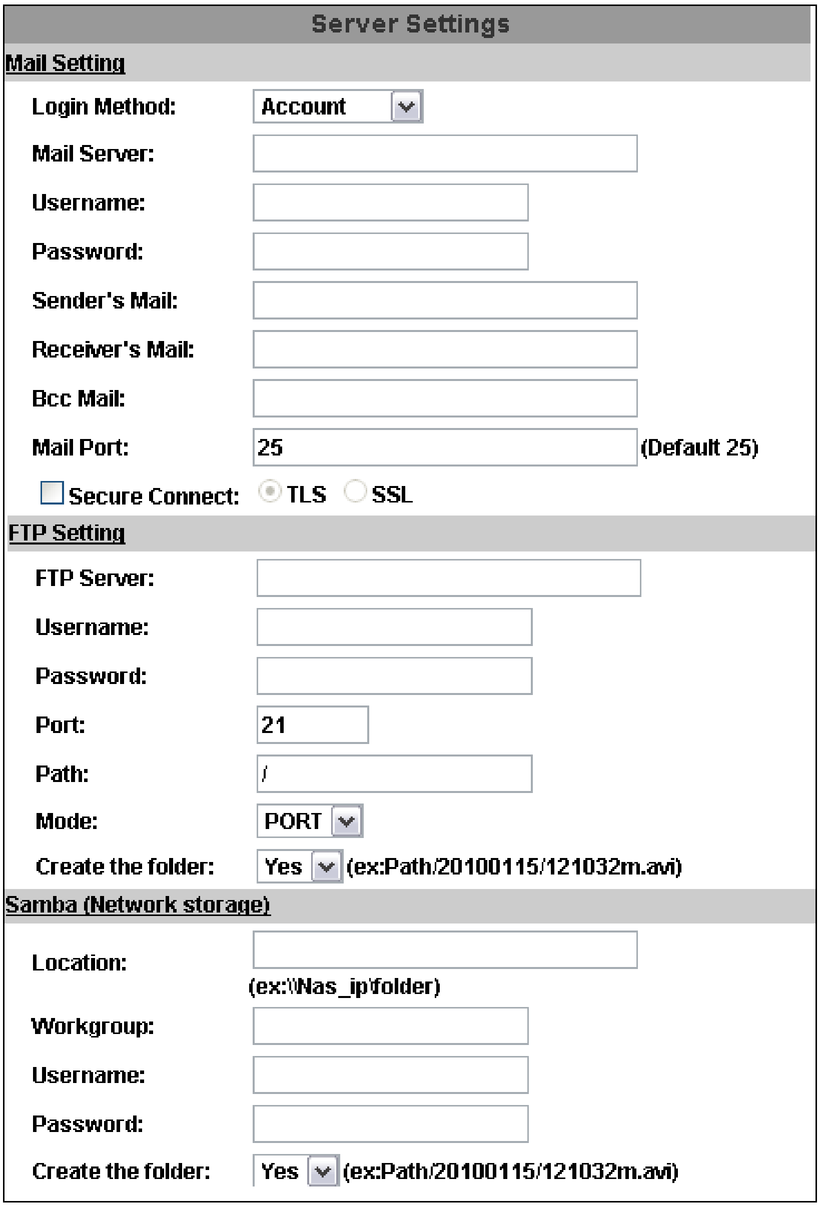
1. Please enable this service
2. Key-in user name.
3. IP Schedule update is default at 5 minutes
4. Click “Apply”.

c. DDNS Status

1. Updating：Information update
2. Idle：Stop service
3. DDNS registration successful, can now log by http://<username>.ddns.camddns.com：Register successfully.
4. Update Failed, the name is already registered：The user name has already been used. Please change it.
5. Update Failed, please check your internet connection：Network connection failed.
6. Update Failed, please check the account information you provide：The server, user name, and password may be wrong.

v、 Server Setting

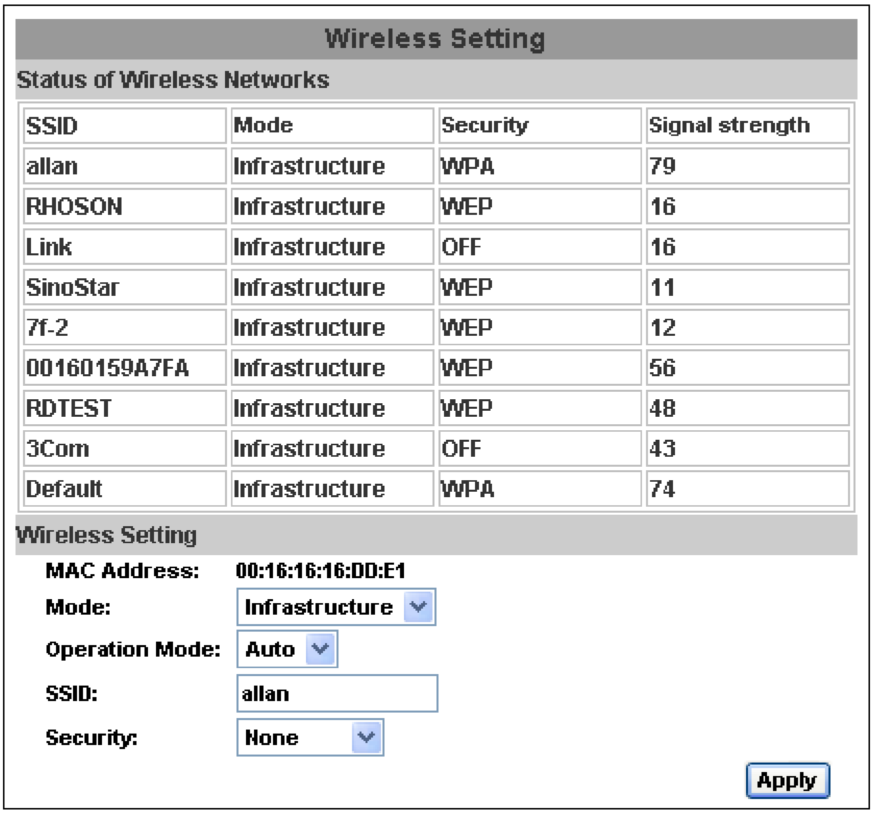
There are three choices of server types available: Email, FTP and SAMBA. Select the item to display the detailed configuration options. You can configure either one or all of them.



vi、 Wireless Setting (Wireless Network Optional)

Supports 802.11 b/g wireless connection.

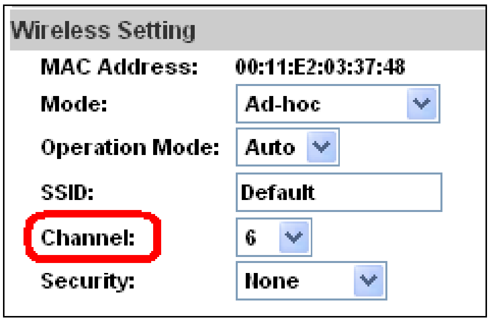
Notice：Wireless network and Ethernet network use the same IP, the user has to unplug Ethernet cable, if Ethernet cable is not unplug, wireless setting can not be executed.



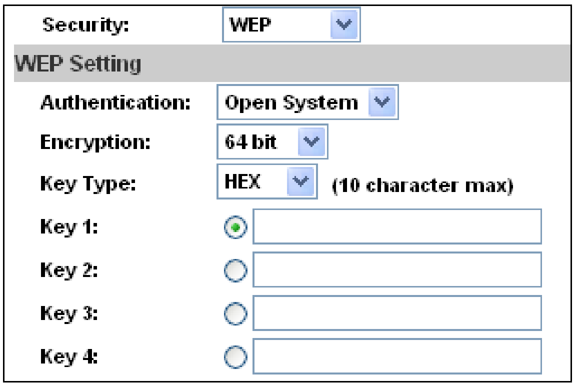
a. Status of Wireless Networks：
scan all wireless services.

b. Wireless Setting：

1. **Mode**：There are Infrastructure and Ad-hoc. Infrastructure is for connecting with the router. Ad-hoc is for connecting with PC. There is “Channel” to select only when user uses Ad-hoc mode.

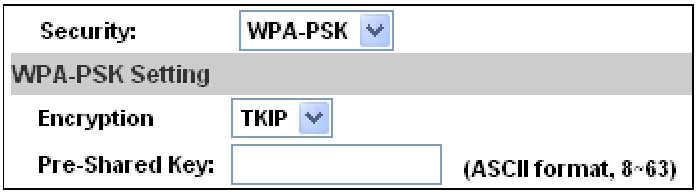


2. **SSID**：Based on AP setting.
3. **Channel**：This is only be used when the user selects Ad-hoc mode in order to avoid conflict.
4. **Security**：It supports “None”, “WEP”, “WPA-PSK” security encryption based on the setting of the Router.
5. **WEP**：



- Authentication：There are Open System and Shared Keys, it is based on different encryptions. This has to be the same as the Router's setting.
- Encryption：The length of key is decided here. In the 64bit encryption, the HEX key should include 10 characters while ASCII key includes 5 characters. In the 128bit encryption, the HEX key should include 26 characters while ASCII key includes 13 characters.
- Key Type：There are HEX and ASCII. When HEX is selected, user only can key in hexadecimal characters(0~9, A~F, a~f). If ASCII is selected, user can key in any alphabet letter and number as the key.
- Key 1~4: Type the key here. The length and type of the key have to match your settings above.

6. **WPA-PSK**：



- Encryption：There are TKIP and AES.
- Pre-Shared Key：Allow any characters .(Case sensitive)

C.A/V Setting

i、 Image Setting



For the security purpose, there are three areas can be setup for privacy mask. Click Area button first and pull an area on the above image. Finally, click Save button to reserve the setting.

Please refer to the details below for Image setting:

a. Brightness, Contrast, Hue, Saturation, Sharpness can be adjusted here.

b. AGC: The sensitivity of camera can adjusts with the environmental light in order to avoid the images too light or too dark.

c. Shutter Time: You can use "Outdoor" or "Indoor" option, or fix it from

1/30 to 1/1000.

d. Sense-Up: incerase the sensitivity of camera to get brighter image at night.

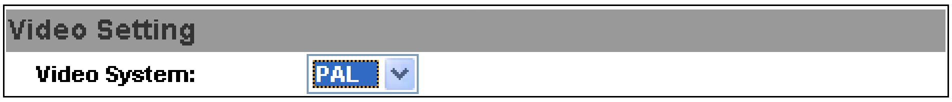
e. D-WDR : Enable the function to reduce the contrast of background with foreground(ex. people).

f. Video Orientation: Flip, mirror, or rotate the image as your requirement.

g. DNR: Adjust this option to reduce the noise.

ii、 Video Setting

User may select the camera system type,

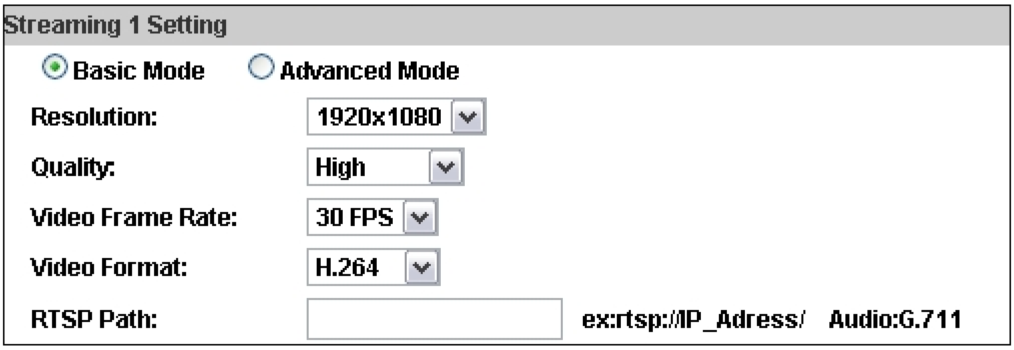


Streaming 1 Setting: Basic mode and Advanced mode

Streaming 2 Setting: Basic mode, Advanced mode, and 3GPP mode

(Max Video Frame Rate for both streaming combined is 30 FPS)

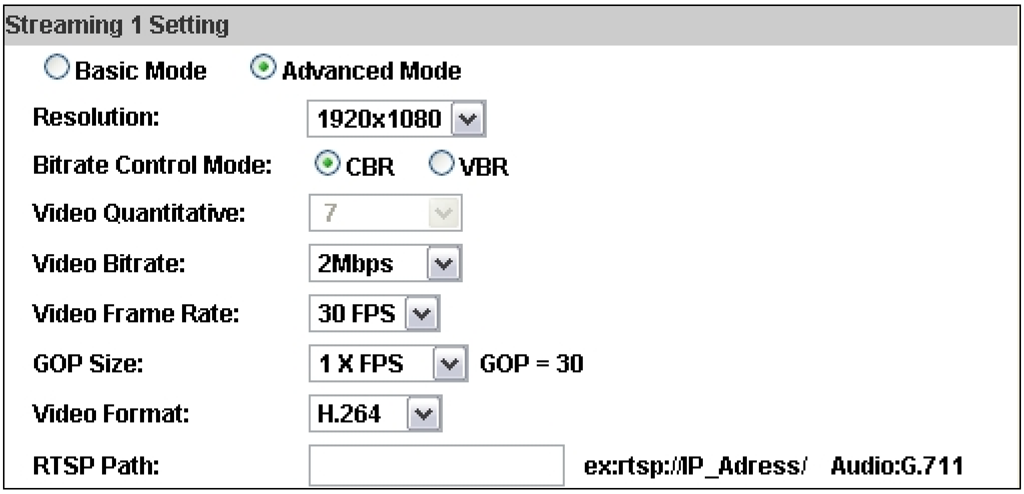
a. Streaming 1 Basic Mode：



1. Resolution：
   There are 5 resolutions can be chosen.
   1920x1080, 1280x720, 640x480, 320x240, 176x144
2. Quality：
   There are 5 levels to adjust:
   Best/ High/ Standard/ Medium/ Low
   The higher the quality is, the bigger the file size is. Also not good for internet transmitting
3. Video Frame Rate：The video refreshing rate per second.
4. Video Format：H.264, MPEG4 or M-JPEG

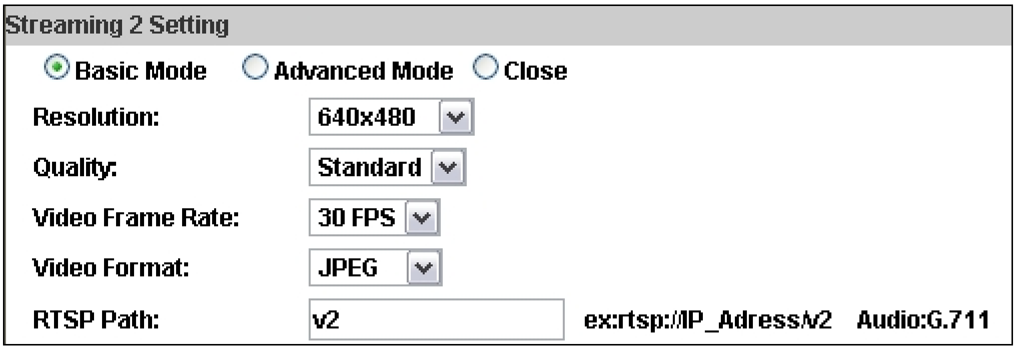
5. RTSP Path: RTSP output name

b. Streaming 1 Advanced Mode：



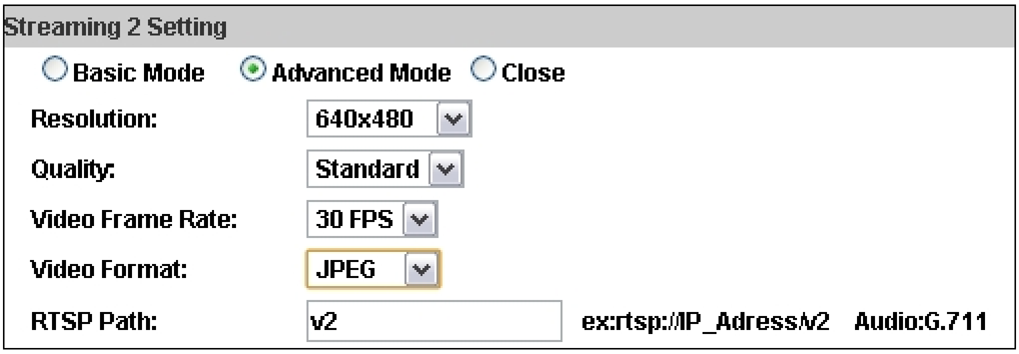
1. Resolution：
   There are 5 resolutions can be chosen.
   1920x1080, 1280x720, 640x480, 320x240, 176x144
2. Bitrate Control Mode
   There are CBR〔Constant Bit Rate〕 and VBR〔Variable Bit Rate〕to use.
   CBR：32Kbps~4Mbps (the higher the CBR is, the better the video quality is)
   VBR：1(Low)~10(High) – Compression rate, the higher the compression rate, the lower the picture quality is; vise versa. The balance between VBR and network bandwidth will affect picture quality. Please carefully select the VBR rate to avoid picture breaking up or lagging.
3. Video Frame Rate
   The video refreshing rate per second.
   NTSC: Max 30 frames/second PAL: Max 25 frames/second
4. GOP Size
   It means "Group of Pictures". The higher the GOP is, the better the quality is.
5. Video Format：H.264, MPEG4 or M-JPEG
6. RTSP Path: RTSP output connecting route

c. Streaming 2 Basic Mode：



1. Resolution：
   There are 5 resolutions can be chosen.
   1920x1080, 1280x720, 640x480, 320x240, 176x144
2. Quality：
   There are 5 levels to adjust:
   Best/ High/ Standard/ Medium/ Low
   The higher the quality is, the bigger the file size is. Also not good for internet transmitting
3. Video Frame Rate：The video refreshing rate per second.
4. Video Format：H.264, MPEG4 or M-JPEG
5. RTSP Path: RTSP output connecting route

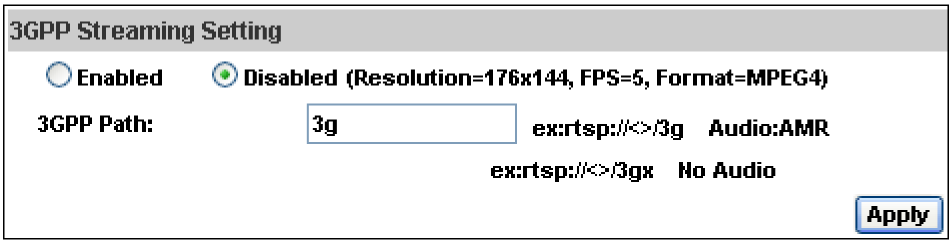
d. Streaming 2 Advanced Mode：



1. Resolution：
   There are 5 resolutions can be chosen.
   1920x1080, 1280x720, 640x480, 320x240, 176x144
2. Quality：
   There are 5 levels to adjust:
   Best/ High/ Standard/ Medium/ Low
   The higher the quality is, the bigger the file size is. Also not good for internet transmitting

3. Video Frame Rate：The video refreshing rate per second.
4. Video Format：H.264, MPEG4 or M-JPEG
5. RTSP Path: RTSP output connecting route

e. 3GPP Streaming mode:



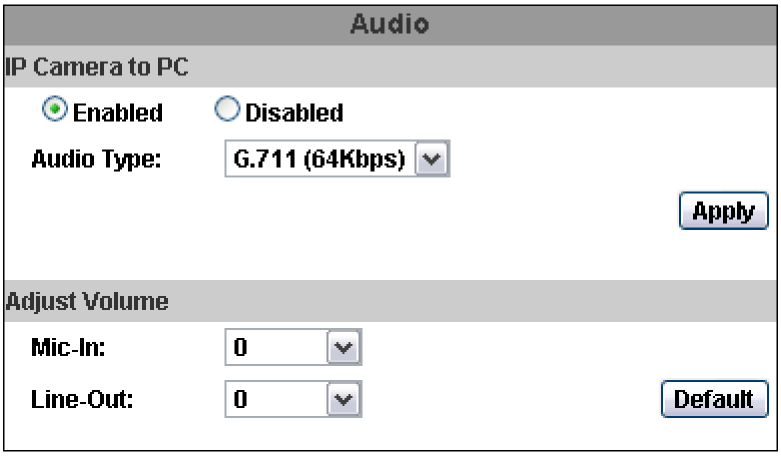
3GPP mode suggested setting: 176x144 resolution, 5FPS, MPEG4 format

1. Enable or Disable 3GPP Streaming
2. 3GPP: 3GPP output name

iii、 Audio：

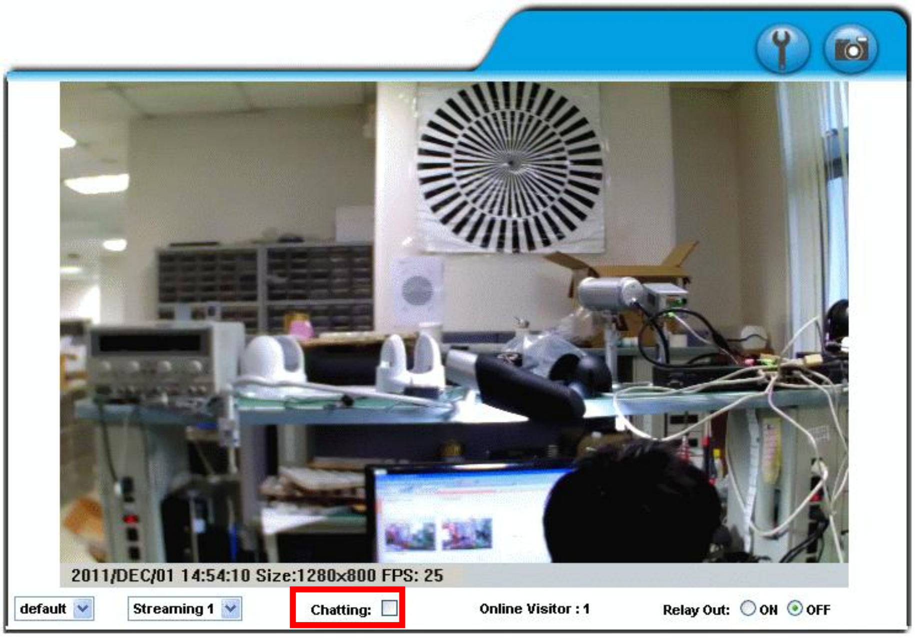
IP CAMERA supports 2-way audio. User can send audio from IP Camera Built-in mic to remote PC; User can also send audio from remote PC to IP Camera's external speaker.

a. Audio from IP camera built-in mic to local PC: select "Enable" to start this function and also can select the audio type.



b. Adjust Volume

c. Audio from local PC to IP Camera: Check "chatting" in the browsing page.

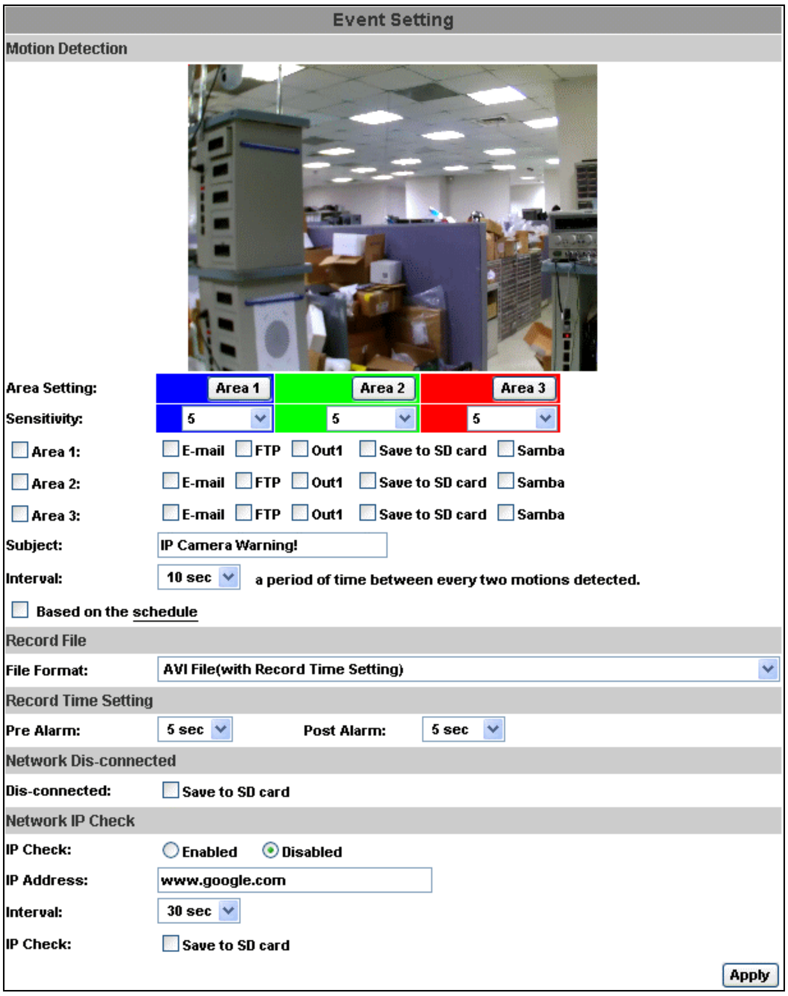


The Audio will not be smooth when enable SD card recording function simultaneously.

D.Event List

IP CAMERA provides multiple event settings.

i、 Event Setting



a. Motion Detection：

IP CAMERA allows 3 areas motion detection. When motion is triggered, it can send the video to some specific mail addresses, transmit the video to remote ftp server, trigger the relay, and save video to local Micro SD card. To set up the motion area, click “Area Setting”. Using mouse to drag and draw the area. The same operation for area 2 and 3.

b. Record File Setting: IP CAMERA allows 3 different types of recording file to change its record size.

When motion/alarm is triggered, there are 3 different types of record mode.

1. AVI File (With Record File Setting)
2. Multi-JPEG (With Record File Setting), only with JPEG compression format.
3. Single JPEG (Single File with Interval Setting)

c. Record Time Setting：

Pre Alarm and Post Alarm setups for video start and end time when motion detected, I/O, or other devices got triggered.

Note: Pre/Post Alarm record time is base on record time setting and IP Cam built-in Ram memory. Limited by IP Cam built-in Ram Memory, When information is too much or video quality set too high, it will cause recording frame drop or decrease on post alarm recording time.

d. Network Dis-connected

When the network is down, it will save the video to local SD card.

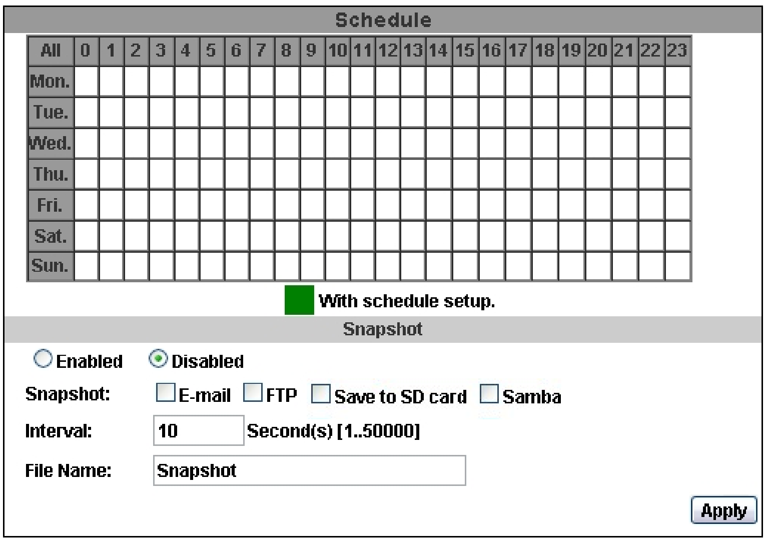
This function is only enabled under wire connection.

e. Network IP check:

Whenever the connection is down, it records the video to SD card. Make sure the video recording is continuous. To use this function, key in the IP address of the PC which has recording software installed. Enable the function of “Save to SD card”, then click “Apply”.

The interval of two video files recorded on SD card is fixed with 30 seconds.

ii、 Schedule



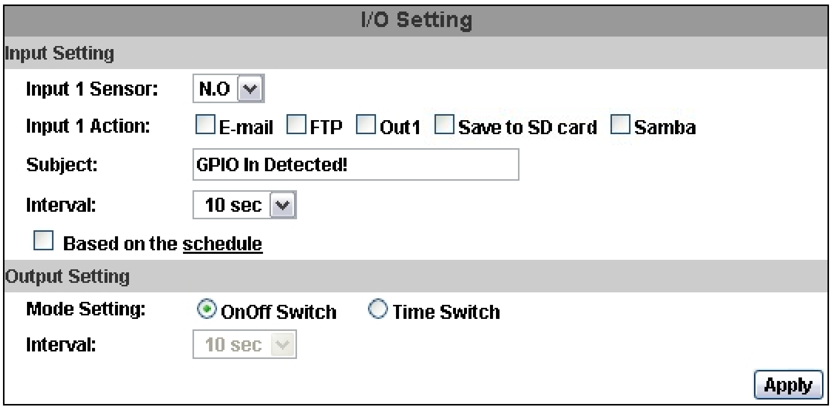
a. Schedule: After complete the schedule setup, the camera data will

be recorded according to the schedule setup.

b. Snapshot: After enable the snapshot function, user can select the storage position of snapshot file, the interval time of snapshot and the reserved file name of snapshot.

c. Interval: The interval between two snapshots.

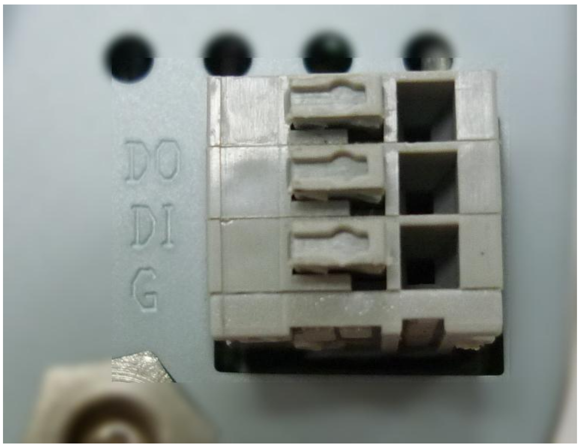
iii、 I/O Setting



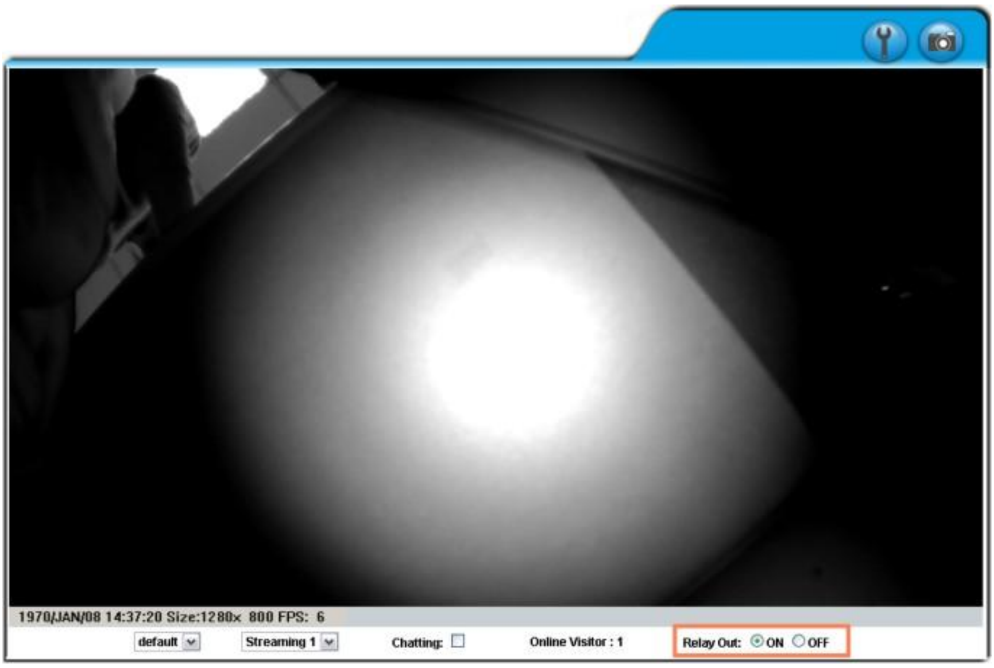
a. Input Setting:
IP Camera supports input and output. When the input condition is triggered, it can send the video to some specific mail addresses, transmit the video to remote FTP server, trigger the relay, save video to local SD card or to SAMBA.

b. Output Setting:
"OnOff Switch" means the camera executes the action when triggered.
"Time Switch" means the camera executes the action according to the interval you choose after triggered.

c. Use the terminal block on the back of camera for I/O connection. Connect the external input devise to DI and G(Ground), and connect the external output devise to DO and G(Ground).



d. The relay out can be switch on and off on the live video page.



iv、 Log List

Log List
System Logs
Logs
Motion Detection Logs
Logs
I/O Logs
Logs
All Logs
Logs

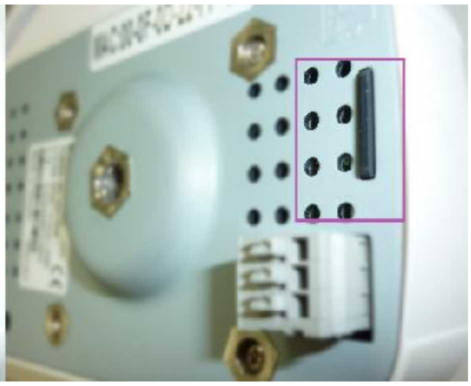
Sort by System Logs, Motion Detection Logs and I/O Logs. In addition, System Logs and I/O Logs won't lose data due to power failure.

V、 Micro SD card

a. Playback

Please Insert Micro SD card before use it. Make sure pushing Micro SD card into the slot completely.





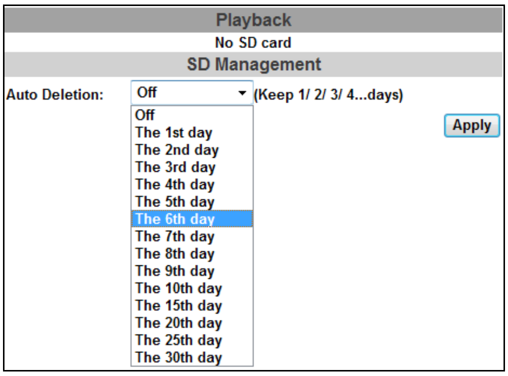
Click the date listed on this page, and it shows the list of the video. The video format is AVI. Click the video to start Microsoft Media Player to play it. To delete the video, check it, then click "Del".

2006/04/17			Del
Time	Video	Event Type	☐
09:05:22	090522f.avi	Network Dis-connected	☐
09:05:52	090552f.avi	Network Dis-connected	☐
09:06:22	090622f.avi	Network Dis-connected	☐
09:06:52	090652f.avi	Network Dis-connected	☐
09:07:22	090722f.avi	Network Dis-connected	☐
09:07:52	090752f.avi	Network Dis-connected	☐
09:08:22	090822f.avi	Network Dis-connected	☐
09:08:51	090851f.avi	Network Dis-connected	☐
09:09:21	090921f.avi	Network Dis-connected	☐
09:09:51	090951f.avi	Network Dis-connected	☐

1 2 3 4 5

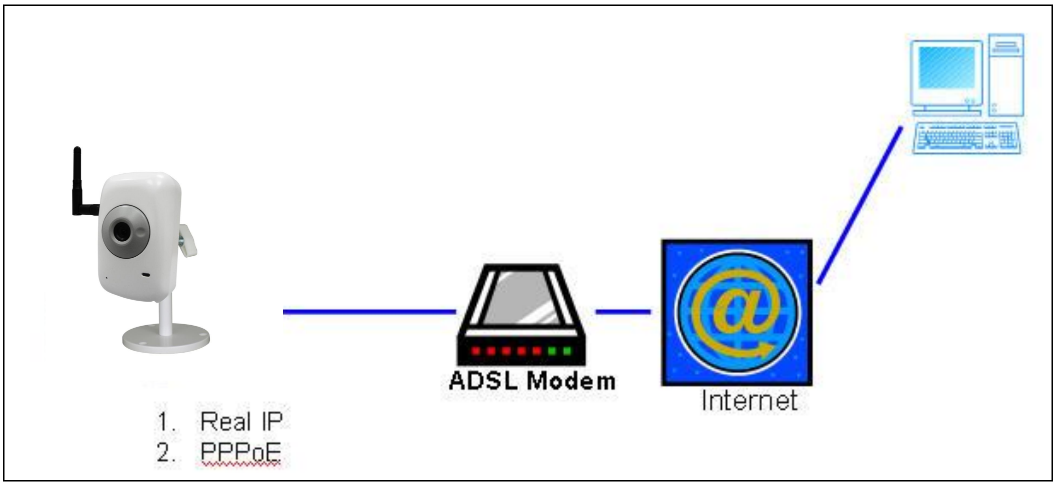
b. SD Management

Choose "The 1st day" means the recoding file will be keep one day. Example: It is five o'clock now. Choose "The 1st day". The files will be kept from five o'clock yesterday to five o'clock today.



VI. Network Configuration

i、 Configuration 1：



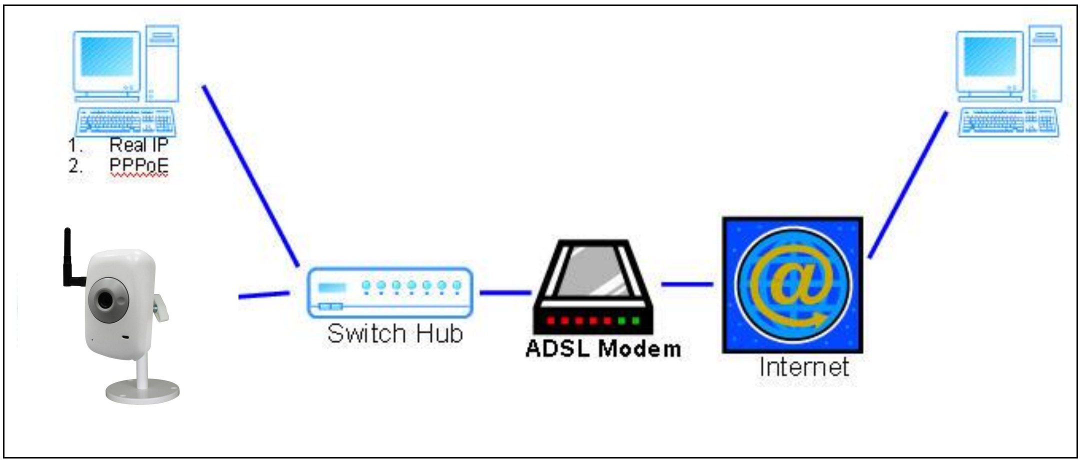
a. Internet Access：ADSL or Cable Modem

b. IP address：One real IP or one dynamic IP

c. Only IP CAMERA connects to the internet

d. For fixed real IP, set up the IP into IP CAMERA. For dynamic IP, start PPPoE.

ii、 Configuration 2：



a. Internet Access：ADSL or Cable Modem

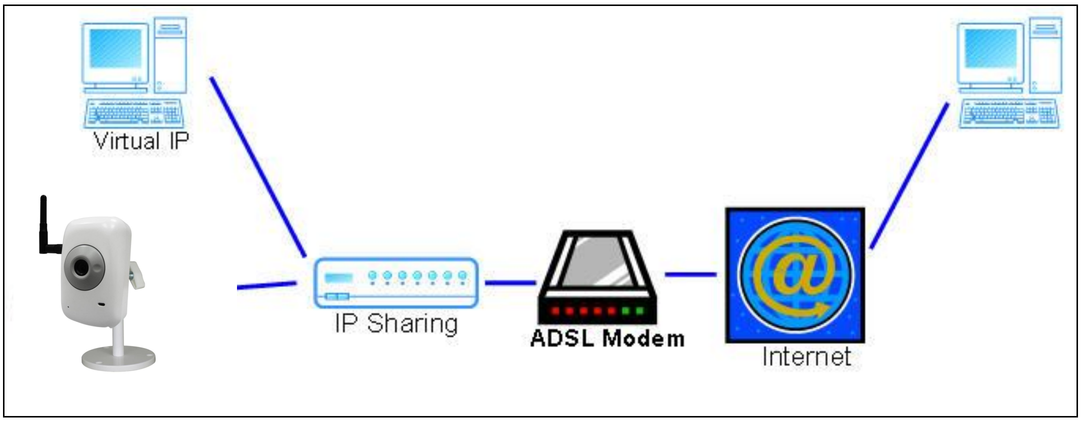
b. IP address：More than one real IP or one dynamic IP

c. IP CAMERA and PC connect to the internet

d. Device needed：Switch Hub

e. For fixed real IP, set up the IP into IP CAMERA and PC. For dynamic IP, start PPPoE.

iii、 Configuration 3：



a. Internet Access：ADSL or Cable Modem

b. IP address：one real IP or one dynamic IP

c. IP CAMERA and PC connect to the internet

d. Device needed：IP sharing

e. Use virtual IP, set up port forwarding in IP sharing.

VII. Factory Default

i、 To recover the default IP address and password, please follow the following steps.

ii、 Remove power, and press and hold the button in the back of IP CAMERA.



iii、 Power on the camera. Don’t release the button during the system booting.

iv、 It will take around 30 seconds to boot the camera.

v、 Release the button when camera finishes proceed.

vi、 Re-login the camera using the default IP (http://192.168.1.200), and user name (admin), password (admin).

VIII. Package contents

i、 IP CAMERA Network Camera

ii、 Adaptor

iii、 CD title (User manual, IP installation Utility)

IX. Micro SD Card

The following is the Micro SD Card recommended:

Transcend	SDHC class4 16GB SDHC class4 32GB SD class4 16GB SD class4 32GB SDHC class6 4GB SDHC class6 8GB SDHC class6 16GB SD class6 4GB SD class6 8GB SD class6 16GB
SanDisk	SDHC class4 4GB SDHC class4 8GB SDHC class4 16GB